Jurisdictional characteristics of wetlands in the study area.

Map ID	NCWAM Designation	Hydrologic Classification	DWQ Wetland Rating	Area (ac.)
WA	Non-tidal Freshwater Marsh	Riparian	16	0.01

Permits

A Nationwide Permit (NWP) 23 will likely be applicable. Other permits that may apply include a NWP No. 33 for temporary construction activities such as stream dewatering, work bridges, or temporary causeways that are often used during bridge construction or rehabilitation. The USACE holds the final discretion as to what permit will be required to authorize project construction.

In addition to the 404 permit, other required authorizations include the corresponding Section 401 Water Quality Certification (WQC) from the NCDWQ. An NCDWQ Section 401 Water Quality General certification for a Categorical Exclusion may be required prior to the issuance of a Section 404 Permit. Other required 401 certifications may include a GC 3688 for temporary construction access and dewatering.

Federally Protected Species

Scientific Name	Common Name	Federal Status	Habitat Present	Biological Conclusion
Percinia rex	Roanoke logperch	Е	No	No Effect
Pleurobema collina	James spinymussel	Е	No	No Effect
Echina laevigata	Smooth coneflower	Е	Yes	No Effect

Smooth coneflower

Suitable habitat for smooth coneflower is present within the study area in the form of regularly maintained roadside shoulder, ecotonal regions between meadows and woodlands, and utility rights-of-way. However, the soil types typically preferred by this species are not present in the study area. Furthermore, associated prairie-loving plant associates were not observed. Surveys were conducted by NCDOT biologists throughout areas of suitable habitat on June 2, 2009. No individuals of smooth coneflower were observed. A review of NCNHP records, updated June 1, 2009, indicates no known occurrences within 1.0 mile of the study area. Updated surveys for the species were conducted on June 6, 2012. No specimens were found.

Biological Conclusion: No Effect

Bald Eagle and Golden Eagle Protection Act

Habitat for the bald eagle primarily consists of mature forest in proximity to large bodies of open water for foraging. Large, dominant trees are utilized for nesting sites, typically within 1.0 mile of open water. No suitable foraging or nesting habitat for bald eagle exists within the study area, or within one mile of the study area.